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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/420,507	10/19/1999	JUNYA KAKU	991207	2900

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EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 07/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/420,507

Applicant(s)

KAKU, JUNYA

Examiner

LUONG T NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claims 1-5 are objected to because of the following informalities:

Claim 1 (line 13), claim 5 (line 3), "said comparing means" should be changed to --said comparison means--.

Claim 2 (line 5), "number of screens" should be changed to --number of scenes--.

Claims 2-5 are objected as being dependent on claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai (US 5,206,730) in view of Kaneko et al. (US 5,262,868) further in view of Hidetoshi et al. JP 06-022262).

Regarding claim 1, Sakai discloses an electronic camera to be driven by a battery (battery, column 4, lines 12-29), comprising an instruction key for instructing for picture taking (release switch 12, figure 1, column 3, line 38); a picture taking means (CCD sensor 2, figure 1, column 3, lines 10-20); a processing means (digital processing circuit 5, figure 1, column 3, lines 18-30); a recording means (memory 7, figure 1, column 3, lines 22-30); a select means for selecting either one of a still image recording mode to picture taking a 1-scene subject image in response to once operating said instruction key and recording said 1-scene image signal to said recording medium, and a continuous image recording mode to picture taking a plurality of scenes of subject images in response to once operating said instruction key and recording said plurality of scenes of image signals to said recording medium (control panel 11, figure 1, column 3, lines 34-38).

Sakai fails to specifically disclose a comparison means for comparing a remaining capacity of said battery with a predetermined threshold value; and a disabling means for disabling said instruction key depending upon a result of comparison by said comparison means. However, Kaneko et al. a digital electronic still camera, which includes a comparing means for comparing one threshold voltage with the battery voltage (column 4, lines 5-13, column 8, lines 50-58). Kaneko et al. also disclose that if the battery voltage is smaller than the threshold voltage, the card battery down flag FD is set, and an alarm is displayed on display 41 (figures 1, 3, column 8, lines 50-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Sakai by the teaching of Kaneko et al. in order to obtain a camera in which a battery voltage could be checked.

Sakai and Kaneko et al. fail to specifically disclose a first enabling means for enabling a first threshold value related to a consumed power required for recording a 1-scene image signal when said still image recording mode is selected; and a second enabling means for enabling a second threshold value related to a consumed power required for recording said plurality of scenes of image signals when said continuous image recording mode is selected. However, Hidetoshi et al. disclose in the moving recording mode, when a battery voltage is less than a 1st power reference voltage (second threshold value), the power supply from battery is interrupted; and in the still picture recording mode, when a battery voltage is less than a 2nd power reference voltage (first threshold value), the power supply from battery is interrupted (See Constitution). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Sakai and Kaneko et al. by the teaching of Hidetoshi et al. in order to effectively use a battery in different recording mode. This saves the capacity of battery.

Regarding claim 5, Sakai, Kaneko et al. and Hidetoshi fail to specifically disclose a display means for displaying character indicative of not-recordable depending upon a result of comparison by said comparison means. However, Kaneko et al. disclose display 41 for displaying a warning when the battery voltage is smaller than the threshold voltage (figure 1, column 8, lines 50-58). It would have been obvious to display a character indicative of not-recordable onto display 41 in order to let the user knows that recording is prevented.

5. Claims 2, 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai

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(US 5,206,730) in view of Kaneko et al. (US 5,262,868) and Hidetoshi et al. JP 06-022262) further in view of Misawa (US 6,208,380).

Regarding claim 2, Sakai, Kaneko et al. and Hidetoshi fail to specifically disclose a storing means to temporarily store said image signal processed by said processing means into an internal memory, and a write means to write, after a predetermined number of scenes of image signals have been stored in said internal memory, said predetermined number of scenes of image signals to said recording medium. However, Misawa discloses a digital camera, in which image signal processed digital image processing circuit 36 is recorded into built-in memory 42 (internal memory), and system control circuit 46 (write means) stores the image data read out from built-in memory 42 in the memory card 12 (recording medium, figures 1, 4, column 4, lines 3-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Sakai, Kaneko et al. and Hidetoshi by the teaching of Misawa in order to store image data representing captured object images before transferring to memory card. This increases the number of capturing images.

Regarding claim 3, Misawa discloses the predetermine number of scenes is related to a recording mode selected by select means (number of captured images stored in memory 42, column 4, lines 7-11).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai (US 5,206,730) in view of Kaneko et al. (US 5,262,868) and Hidetoshi et al. JP 06-022262) further in view of Ejima (US 6,188,432).

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Regarding claim 4, Hidetoshi discloses the second threshold value assuming a common value (1st reference voltage, Constitution) in between the motion image recording mode and the successive shot recording mode. Sakai, Kaneko et al. and Hidetoshi fail to specifically disclose the continuous image recording mode includes a motion image recording mode to take a first number of scenes of motion images and recording said first number of scenes of image signal to said recording medium, and a successive shot recording mode to perform successive shots of still images in a second number of scenes less than said first number of scenes and recording said second number of scenes of image signal to said recording medium; and the processing means creating an image signal of a first resolution when said motion image recording mode is selected and an image signal of a second resolution higher than the first resolution when said successive shot recording mode is selected. However, Ejima discloses an electronic camera, in which the continuous shooting mode includes high speed continuous shooting mode (motion image recording mode), and low speed continuous shooting mode (successive shot recording mode), and the image data is recorded in memory card 24 (figure 4, column 3, lines 43-55, column 4, lines 32-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Sakai, Kaneko et al. and Hidetoshi by the teaching of Ejima in order to allow the user to take picture at desired mode.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Konishi et al. (US 4,546,390) disclose combination still and motion picture electronic camera recorder.

Wakui (US 5,640,203) discloses recording operation control device.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Luong Nguyen** whose telephone number is (703) 308-9297. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reach on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:
(703) 872 - 9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

LN LN
7/10/2003


NGOC-YEN VU
PRIMARY EXAMINER